

## NASA released a Solar Terrestrial Probes #5 AO

NASA's Science Mission Directorate (SMD) released an Announcement of Opportunity (AO) on July 31, 2017 for the Solar Terrestrial Probes #5 – Interstellar Mapping and Acceleration Probe (STP-5, hereafter IMAP) mission. The Solar Terrestrial Probes Program conducts strategic science missions that target prioritized science goals in Heliophysics. The IMAP mission will be conducted as a Principal Investigator (PI)-led space investigation under a not-to-exceed cost cap.

It is anticipated that up to two IMAP investigations will be selected for 12-month Phase A concept studies. Phase A concept studies will be capped at \$2.5M each. The total PI cost cap for the life cycle of the IMAP development and mission (Phases A through E) is \$492M (FY17), excluding standard launch vehicle services and incentives, which are described in the AO. Lower-cost investigations are encouraged. Approximately six months after the conclusion of the concept studies, it is planned that one IMAP investigation will be selected to continue into Phase B and subsequent mission phases.

The IMAP investigation must address a preponderance of science goals for the Interstellar Mapping and Acceleration Probe as spelled out in the IMAP AO. For reference, related IMAP science goals are listed on page 98 of the *2013 National Research Council Decadal Strategy for Solar and Space Physics report, Solar and Space Physics: A Science for a Technological Society* ([www.nap.edu/catalog.php?record\\_id=13060](http://www.nap.edu/catalog.php?record_id=13060)). PIs are not bound to follow the Decadal Survey IMAP reference mission architecture. Innovative concepts for best addressing IMAP science goals are encouraged. NASA requires and incentivizes proposers to include a Student Collaboration to provide an active research experience to aspiring students. NASA incentivizes IMAP investigations to propose an IMAP Active Link for Real Time (I-ALIRT) to boost understanding of space weather and test new forecasting capabilities. NASA also incentivizes IMAP investigations to propose Technology Demonstration Opportunities (TDOs) to demonstrate new instrumentation capabilities that take full advantage of access to the specific environments to which the mission will be exposed. Student Collaboration, I-ALIRT and TDOs are funded outside of the cost cap and may possibly not be selected even if the parent mission is selected for flight.

IMAP launch vehicle costs and procurement will be the responsibility of NASA. Launch vehicle standard services will be provided as Government-Furnished Equipment (GFE). These costs will not be included in the PI cost cap. The cost of mission specific and special launch services is the responsibility of the PI and must be included within the cost cap. NASA offers an intermediate class launch vehicle, which is described in the AO and supporting documentation.

The notional schedule for the solicitation is as follows:

|                              |                    |
|------------------------------|--------------------|
| Release of final AO          | July 31, 2017      |
| Pre-proposal workshop        | August 25, 2017    |
| Notification Proposals due   | September 11, 2017 |
| Full Proposals due           | October 30, 2017   |
| Selection of Phase A studies | May 2018           |
| Concept study reports due    | Spring 2019        |
| Down-selection               | Fall 2019          |
| Launch date                  | End of 2024        |

NASA released the IMAP AO on July 31, 2017. The AO is based on the latest Standard PI-led Mission AO Template. Proposers should read the IMAP AO carefully.

The issuance of the 2017 Interstellar Mapping and Acceleration Probe AO does not obligate NASA to any specific proposal selection. Any costs incurred by prospective investigators in preparing submissions in response to the solicitation are incurred completely at the submitter's own risk.

Further information has been posted on the Solar Terrestrial Probes Program Acquisition Page at <https://soma.larc.nasa.gov/STP/IMAP>, which will be updated over time. Questions or comments about the Heliophysics IMAP AO may be addressed to Dr. Arik Posner at [arik.posner@nasa.gov](mailto:arik.posner@nasa.gov). Responses to all inquiries will be answered by E-mail and also posted at the Frequently Asked Questions (FAQ) location of the STP Program Acquisition website; anonymity of persons/institutions who submit questions will be preserved.